

WHAT IS CLAIMED IS:

1. A process for methane fermentation treatment of an organic wastewater containing a sulfur compound, which comprises:

detecting a concentration of hydrogen sulfide in a biogas generated from a step of methane fermentation treatment; and

conducting a control of subjecting the organic wastewater to a desulfurization treatment operation in the case that the concentration of hydrogen sulfide in the biogas exceeds a predetermined value.

2. The process for methane fermentation treatment of an organic wastewater according to claim 1,

wherein the predetermined value of the concentration of hydrogen sulfide is from 1% to 4%, preferably from 1% to 2%.

3. The process for methane fermentation treatment of an organic wastewater according to claim 1,

wherein the desulfurization treatment operation is a

desulfurization treatment of adding a desulfurizing agent containing an iron ion so that a molar ratio of the iron ion to sulfur is from 0.05 to 1.

4. The process for methane fermentation treatment of an organic wastewater according to claim 1,

wherein the desulfurization treatment operation is a desulfurization treatment operation of adding a desulfurizing agent containing an insoluble iron.

5. The process for methane fermentation treatment of an organic wastewater according to claim 3 or 4,

wherein the desulfurization treatment operation has a function of regenerating the desulfurizing agent by an aeration.

6. An apparatus for methane fermentation treatment of an organic wastewater, which comprises:

a desulfurization treatment tank or a liquid-transferring pipe where an organic wastewater containing a sulfur compound is subjected to a desulfurization treatment operation; and

a methane fermenter where the organic wastewater subjected to the desulfurization treatment is subjected to methane fermentation treatment,

wherein the methane fermenter has: a means for measuring a concentration of hydrogen sulfide in a gas generated in the fermenter; and a controlling means for controlling the desulfurization treatment based on the measured value.

7. The apparatus for methane fermentation treatment of an organic wastewater according to claim 6,

wherein the desulfurization treatment tank has a function of regenerating the desulfurizing agent by an aeration.